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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/787,095

03/13/2001

Gijsbert Joseph Van Den Enden

PHN 17,554

1084

24737

7590

06/10/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/787,095

Applicant(s)

VAN DEN ENDEN, GILBERT  
JOSEPH

Examiner

Peter Vincent Agustin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 7, 2005 has been entered.

### ***Claim Objections***

2. Claims 1, 7 & 8 are objected to because of the following informalities:

Claim 1, line 5: a comma should be added after "states".

Claim 7, line 6: "means" should be --and means--.

Claim 7, line 6: "to be a measured" should be --in response to the measured--.

Claim 8, line 1: "means" should be --the means--.

Claim 8, line 2: The Examiner suggests replacing "spots already" with --spots where a piece already--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in

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the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites that “a reflection is measured from the spot of only one of the states and a measured value of the reflection is used for controlling the power of the laser diode for writing both states”. It is not disclosed how this function is achieved.

Claim 2 recites that “the reflection is measured at spots where a piece already in a highly reflective state is overwritten with a highly reflecting state”. It is not disclosed how this function is achieved.

Claims 4 & 5 recite comparing a detector measurement to a reference value and adjusting laser power based on this measurement. The Applicant’s disclosure does not recite a specific value or a range for the claimed “reference value” which will enable one of ordinary skill in the art to make a device that measures a reflection from a written spot of “only one of the states” during writing.

Claim 7 recites a “means for measuring a reflection from a written spot of only one of the states during writing” which appears to correspond to the peak value detector 6 in Figure 1. It is not disclosed how the peak value detector is configured to measure a reflection from a written spot of “only one of the states”.

Claim 7 recites a “means for controlling the power of the laser diode” which appears to correspond to the element 1 in Figure 1, which consists of a multiplying stage 11, summing stage 12, and a control network (for determining time-dependent control behavior) 13. It is not clearly disclosed how these elements are interrelated and how this combination of elements is configured to achieve power control.

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Claim 8 recites that the means for measuring the reflection “measures at spots already written in a highly reflecting state is being overwritten with a highly reflecting state”. It is not disclosed how the peak value detector is configured to perform this function.

Claims 10 & 11 have similar limitations as claims 4 & 5.

Claims 2-5 & 8-12 are dependent upon rejected base claims.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: e.g., means or structural elements for providing the claimed results, i.e., recording two different states, adjusting a power level, measuring from the spot of only one of the states, and controlling the power for writing both states.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 6-8 & 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (US 5,712,839).

In regard to claim 1, Aoki discloses an electronic optical recording device (Figure 2) for optical recording on rewritable media (MD), with which two different states (note “phase-change-type”, “erase power” and “recording power” in column 4, lines 52-61) can be recorded

by adjusting a power level of a laser diode (1) depending on information content to be generated on the media, characterized in that during writing of the states, a beam from the laser diode is focused upon a spot that is written for one of the states (column 4, lines 66-67: “when the light source 1 radiates the light having the bias power (the erase power)”), a reflection is measured from the spot of only one of the states (column 4, line 62 thru column 5, line 1: note “when the light source 1 radiates the light having the recording power, the reflection light from the recording medium **is not monitored**” and “when the light source 1 radiates the light having the bias power (the erase power), the reflection light from the recording medium **is monitored**”) and a measured value of the reflection is used for controlling the power of the laser diode for writing of both states (column 6, lines 58-61).

In regard to claim 2, Aoki discloses that the reflection is measured at spots where a piece already in a highly reflecting state is overwritten with a highly reflecting state (note “phase-change-type” and “erase power” in column 4, lines 52-61, which “erase power” is known in the art to provide a highly reflecting state when used in a phase-change-type recording medium).

In regard to claim 6, Aoki discloses that the reflection is measured when a highly reflective state is written (note “phase-change-type” and “erase power” in column 4, lines 52-61, which “erase power” is known in the art to provide a highly reflective state when used in a phase-change-type recording medium).

In regard to claim 7, Aoki discloses an electronic optical recording device (Figure 2) for optical recording on rewritable media (MD) that records by adjusting a power level of a laser diode (1) to one of two different states (note “phase-change-type”, “erase power” and “recording power” in column 4, lines 52-61) depending on information content to be recorded on the media,

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comprising: means (2 & 3) for measuring a reflection from a written spot of only one of the states during writing (column 4, line 62 thru column 5, line 1: note “when the light source 1 radiates the light having the recording power, the reflection light from the recording medium is not monitored” and “when the light source 1 radiates the light having the bias power (the erase power), the reflection light from the recording medium is monitored”); and means (6 & 7) for controlling the power of the laser diode to be a measured value of the reflection for writing both states (column 6, lines 58-61).

Claims 8 & 12 have limitations similar to those of claims 2 & 6; thus, they are rejected on the same basis.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-5 & 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki.

For a description of Aoki, see the rejections above. Furthermore, Aoki discloses: in regard to claim 3, that a DC level detector (Figure 2, element 3) measures reflected light; in regard to claim 4, that the DC level detector measurement is compared to a reference value (output of element 4); and in regard to claim 5, that the power of the laser diode is adjusted if a comparison of the DC level detector to the reference value indicates a deviation (column 4, lines 48-51). Aoki does not disclose measuring reflected light using “a signal peak detector”, as required by claims 3-5.

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Official Notice is taken that both the concept and advantages of using a signal peak detector in measuring reflected light is old and notoriously well-known in the art, and that measuring reflected light using a signal peak detector and measuring reflected light using a DC level detector are obvious variants of each other. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention by the Applicant to have measured the reflected light of Aoki using a signal peak detector because both techniques, i.e., the claimed measuring reflected light using a signal peak detector and Aoki's teaching of measuring reflected light using a DC level detector, are art-recognized equivalent alternative techniques used for the same purpose of measuring reflected light, and therefore, one of ordinary skill in the art would have expected the Applicant's invention to perform equally well with either techniques.

Claims 9-11 have limitations similar to those of claims 3-5; thus, they are rejected on the same basis.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 571-272-7567. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

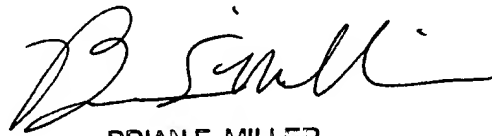
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin  
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A handwritten signature in black ink, appearing to read "B. E. Miller", written in a cursive style.

BRIAN E. MILLER  
PRIMARY EXAMINER